

WHAT IS CLAIMED IS:

1. A sealed motor compressor comprising, in a sealed container, a compressing element and an electromotive element for driving the compressing element,

wherein said electromotive element is fixed to said sealed container and comprises a stator provided with a stator winding and a rotor which rotates in the stator, and

said rotor comprises a squirrel-cage secondary conductor disposed in a peripheral portion of a rotor yoke and a permanent magnet embedded in the rotor yoke.

2. The sealed motor compressor according to claim 1 wherein the electromotive element comprises a single-phase bipolar constitution.

3. The sealed motor compressor according to claim 2 wherein the electromotive element is started by a system in which a startup capacitor is used.

4. The sealed motor compressor according to claim 2 or 3 wherein the stator winding comprises a main winding and an auxiliary winding, and a winding ratio of the respective windings by effective winding number calculation is set to be in a range of 1.0 ± 0.5 .

5. The sealed motor compressor according to any one

of claims 1 to 4 wherein the squirrel-cage secondary conductor of the rotor comprises a skewed structure.

6. The sealed motor compressor according to any one of claims 1 to 5 wherein the permanent magnet is a rare earth magnet.

7. The sealed motor compressor according to any one of claims 1 to 6 wherein the number of permanent magnets embedded in the rotor yoke is any number selected from the group consisting of two, four, six and eight.

8. The sealed motor compressor according to any one of claims 1 to 7, further comprising current-sensitive protection means for detecting a line current.

9. A sealed motor compressor comprising, in a sealed container, a compressing element and an electromotive element for driving the compressing element, said electromotive element being driven by a three-phase power source,

wherein said electromotive element is fixed to said sealed container and comprises a stator provided with a stator winding and a permanent magnet embedded type rotor which rotates in the stator, and

said rotor comprises a squirrel-cage secondary conductor disposed in a peripheral portion of a rotor yoke

and a permanent magnet embedded in said rotor yoke.

10. The sealed motor compressor according to claim 9 wherein the electromotive element comprises a three-phase bipolar constitution.

11. The sealed motor compressor according to claim 9 or 10 wherein the squirrel-cage secondary conductor of the rotor comprises a skewed structure, and a skew pitch is set to more than 0, and 1.5 slot pitches or less.

12. The sealed motor compressor according to claim 9, 10 or 11 wherein the permanent magnet is a rare earth magnet.

13. The sealed motor compressor according to any one of claims 9 to 12 wherein the number of permanent magnets embedded in the rotor yoke is any even number.

14. The sealed motor compressor according to any one of claims 9 to 13, further comprising current-sensitive protection means for detecting a line current.

15. The sealed motor compressor according to any one of claims 9 to 14 wherein capability control is possible.